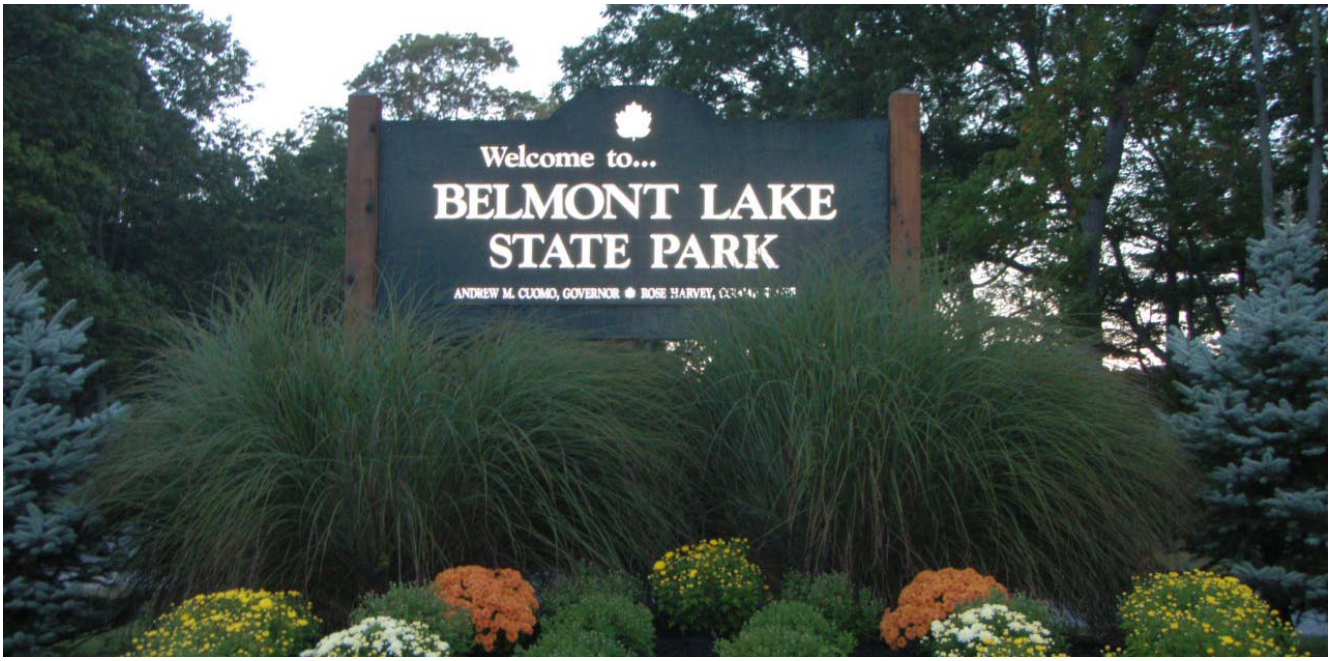
SANITARY SYSTEMS CLOSURE PLAN

BELMONT LAKE STATE PARK



DRAFT INTERAGENCY TRANSMISSION

Prepared For: New York State Office of Parks, Recreation and Historic Preservation
Long Island Region
Belmont Lake State Park

Submitted to: EPA Region 2
Ground Water Compliance Section
290 Broadway, 20th Floor
New York, NY 10007-1866

Prepared By: Cashin Associates, P.C.
1200 Veterans Memorial Highway
Hauppauge, NY 11788

January 26, 2016

TABLE OF CONTENTS

Belmont Lake State Park
Closure Plan for Class V Injection Wells

Location: Belmont Lake State Park
625 Belmont Avenue
West Babylon, New York 11704

Description of Park

Belmont Lake State Park (BLSP), located in West Babylon is a 463-acre park bisected by the Carlls River and Belmont Lake. The Park, established in 1926, had been owned by August Belmont and served as farmland for some of Belmont's equestrian activities. Robert Moses chose this Park to establish the general headquarters for all state parks on Long Island in 1935, which serves the public today as regional office for the Long Island region of New York State Office of Parks, Recreation and Historic Preservation (State Parks). The park has approximately 225,000 visitors a year.

Description of Work

State Parks has determined that sewering BLSP and decommissioning its on-site sanitary systems are warranted because of the area's particular groundwater and soil conditions. The area has a high groundwater table and is proximate to surface waters, including Belmont Lake and the associated Carll's River system. Some of the on-site systems in use are aged and deteriorated and large on-site systems are not compliant with current federal requirements. Furthermore, the need for sewering is demonstrated by the Park's location in an area identified as a high priority for sewering by Suffolk County. The Sewer District No. 3, Southwest Sewer District Service Area Expansion Project Feasibility Report indicated that the Park is essentially surrounded by areas identified as the highest priority for sewering because of adverse environmental conditions (i.e. shallow groundwater, proximity to streams and wetlands), as well as socio-economic conditions.

A. Site Schematic

A site aerial is attached (Attachment 1) showing all buildings on the site and all sanitary outfalls (outfalls 1 through 16A). All on site systems will be decommissioned and all facilities will be connected to the Suffolk County Sewer District #3. Plans for the decommissioning of existing on-site systems as well as the new installations were submitted to Suffolk County and were approved by Suffolk County, Department of Health Services on June 15, 2015. Construction will begin shortly and is scheduled to be completed in the summer of 2016.

B. Description of Business

The Park is primarily visited by families seeking outdoor gatherings, picnics, and informal sports activities on the courts and fields. The Park's significant natural features include the spring-fed Belmont Lake and a significant wetland complex. The lake provides springtime trout fishing and summer bass fishing for recreational anglers who use the Park. The lake is encompassed by a multi-use path.

C. Description of Fluids Injected

The on-site systems treat only sanitary human waste. No known drains which could permit chemicals or industrial waste to enter the sanitary waste are connected to these systems. Attached (Attachment 2) are the results of a composite sludge sample taken from outfalls, 7,11 and 12. All results are below the action levels established by the Suffolk County Department of Health Services and included in their Standard Operating Procedure SOP No. 9-95 "pump-out and soil clean up criteria".

D. Connection Between Drains and Injection Wells

The engineering firm of Cashin Associates, P.C. (CA) 1200 Veteran's Memorial Highway, Hauppauge, NY 11788 assisted by a utility mark out company verified connection of all drains to the subject injection wells. They utilized visual inspection, dye tests and ground penetrating radar to determine drain locations.

E. Description of Permanent Closure

Attachment 3 is a detailed specification for closure of injection wells associated with the on-site sanitary systems.

F. Contaminant Removal

While we do not expect to encounter hazardous waste/soils based on our investigation if they are encountered, all waste/contaminated soils will be removed from in and around the cesspool until visibly clean soil is reached. Removal will be by excavation. Disposal of the waste will follow the requirements of 6 NYCRR Part 360. Note that attachment 3, section 21500 of the specification requires both visual inspection and the use of a PID hand held VOC monitor at each injection well. Liquid wastes will be removed by a Suffolk County licensed hauler and disposed at a licensed scavenger waste facility.

G. On-site Storage of Excavated Material

Onsite storage of material found to be hazardous will be in tarp covered roll off containers until disposal.

H. Waste characterization

Referring to section II – A.1 Large capacity cesspools that have received only sanitary waste, from the Region 2 Instructions, which discusses well specific sampling requirements, "Large Capacity" means serves or designed to serve 20 or more people per day. The cesspool must be pumped out and the wastes must be disposed of properly by a licensed hauler. Excavation, end-point sampling and analysis are typically not required. The waste/fluids that entered the Class V well previously were untreated sanitary waste containing human excreta. Thus no testing will be conducted, other than visual inspection and use of a hand help VOC monitor.

I. Backfill

Sites will be backfilled with clean inert sand.

J. Final Report

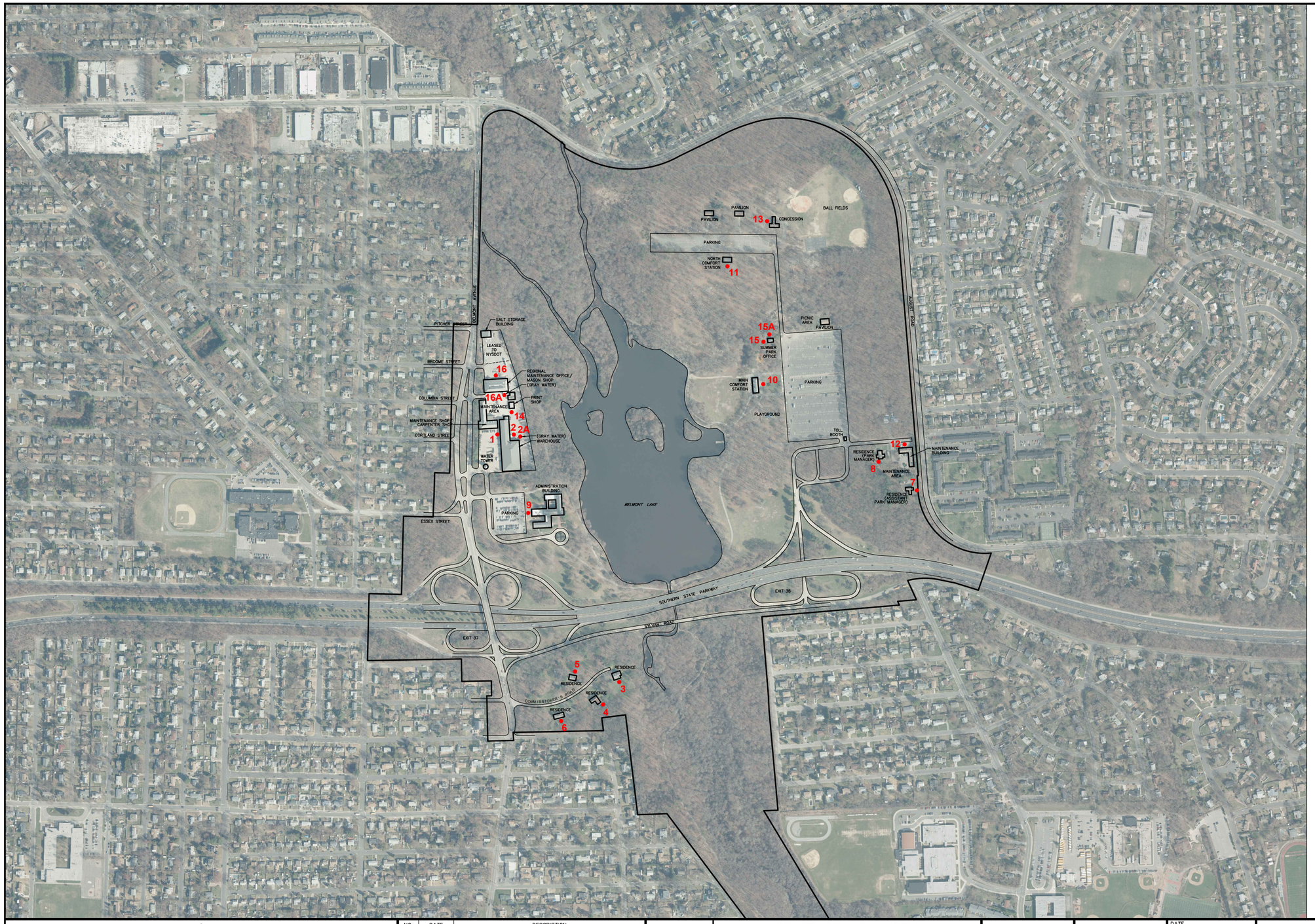
A Final Remediation/ Closure Report will be issued upon completion of the construction project closing the subject class V wells. Construction is expected to be completed in the summer of 2016. The report will be sent to:

Chief
Ground Water Compliance Section
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

ATTACHMENTS

Attachment 1

Site Plan Outfall Location



SANITARY OUTFALLS	
No.	**LOCATION**
1	MAINTENANCE/CARPENTER SHOP
2	WAREHOUSE
2A	WAREHOUSE
3	RESIDENCE
4	RESIDENCE
5	RESIDENCE
6	RESIDENCE
7	RESIDENCE
8	RESIDENCE
9	ADMINISTRATION BUILDING
10	COMFORT STATION
11	COMFORT STATION
12	MAINTENANCE BUILDING
13	CONCESSION
14	PRINT SHOP
15	PARK OFFICE
15A	PARK OFFICE
16	MAINTENCE OFFICE/MASON SHOP
16A	MAINTENCE OFFICE/MASON SHOP

Cashin Associates, P.C.
ENGINEERING • PLANNING • CONSTRUCTION MANAGEMENT
1200 Veterans Memorial Highway • Hauppauge, New York 11788 • 631.348.7600
80 SW 8th St, Ste 2809 • Miami, Florida 33130 • 305.579.2006

NO.	DATE	DESCRIPTION

STATE OF NEW YORK
OFFICE OF PARKS, RECREATION AND HISTORIC PRESERVATION

BELMONT LAKE STATE PARK
SANITARY SYSTEMS INSPECTION

DATE	JANUARY 2016
DESIGNED BY	XX
DRAWN BY	R.J.W
CHECKED BY	T.L.
SCALE	1"=300'

ATTACHMENT 1

SITE PLAN
OUTFALL LOCATION

14014.031

DRAWING NUMBER
1

SHEET 1 OF 1

PRINT: 01/16/16-2:38pm X:\STATE OF NEW YORK\14014-031 Clean Water Act Litigation Support\Figures\AutoCad\Site Plan.dwg

Attachment 2

Analytical Report

Summary Chart - Detections and comparison to action levels*

Sample Results: BL-1 Composite Sample from outfalls #7, #11, & #12

Sample	Results ug/Kg	SCDHS ug/Kg Action Levels
Carbon Disulfide	46.8	5,600
4-Isopropyltoluene	126	22,000
1,4-Dichlorobenzene	23.3	3,600
Toluene	170	3,000
Fluorene	610	200,000
Phenanthrene	2,360	200,000

Sample	Results mg/Kg	SCDHS mg/Kg Action Levels
Mercury	1.4	3.7
Arsenic	5.77	30
Barium	56.5	4,000
Beryllium	0.87	240
Cadmium	2.87	40
Chromium	44.5	100
Copper	234	8,500
Lead	138	2,000
Nickel	10.5	650
Silver	23.3	50

* Suffolk County Action Levels Reported in Standard Operating Procedure for the Adminstration of Article 12 of the Suffolk County Sanitay Code - Article 12 - SOP No. 9-95

Environmental Quality Services, Inc.
208 Route 109 Suite 101, Farmingdale NY 11735
Phone - 631-249-1456 Fax - 631-249-8344

10/23/2013

ANALYTICAL REPORT

Laboratory Identifier: 1310199
Received: 10/14/2013 11:44
Sampled by: MARC CALIFANO

Client: Cashin Associates, PC
1200 Veterans Memorial Hwy
Hauppauge,
NY 11788

Project: BELMONT LAKE STATE PARK
BELMONT LAKE STATE PARK
BABYLON,
NY 11702
Area: 12035.014

Manager: MARC CALIFANO

Respectfully submitted,

Juan R.Cuba - Technical Director

NYS Lab ID # 10969
NJ Lab ID # PH0645
CT Lab ID # PH0645

Environmental Quality Services, Inc.
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Phone - 631-249-1456 Fax - 631-249-8344

10/23/2013

Volatiles - EPA 8260C

Sample: 1310199-1
Client Sample ID: BL-1
Matrix: Soil
Remarks: See Case Narrative
Analyzed Date: 10/15/2013
Prepared by Method: 5035A

Type: Composite

Collected: 10/14/2013 11:15
% Solid: 14.6%

Analytical Results

Cas No	Analyte	DF	MDL	Result*	Units	Q
67-64-1	Acetone	1	46.2	ND	ug/Kg	U
56-23-5	Carbon Tetrachloride	1	12.4	ND	ug/Kg	U
67-66-3	Chloroform	1	13.8	ND	ug/Kg	U
71-43-2	Benzene	1	12.8	ND	ug/Kg	U
71-55-6	1,1,1-Trichloroethane	1	12.5	ND	ug/Kg	U
74-83-9	Bromomethane	1	13.8	ND	ug/Kg	U
74-87-3	Chloromethane	1	10.2	ND	ug/Kg	U
74-95-3	Dibromomethane	1	11.0	ND	ug/Kg	U
74-97-5	Bromochloromethane	1	13.6	ND	ug/Kg	U
75-00-3	Chloroethane	1	13.7	ND	ug/Kg	U
75-01-4	Vinyl Chloride	1	15.1	ND	ug/Kg	U
75-09-2	Methylene Chloride	1	12.9	ND	ug/Kg	U
75-15-0	Carbon disulfide	1	8.97	**46.8**	ug/Kg	
75-25-2	Bromoform	1	6.23	ND	ug/Kg	U
75-27-4	Bromodichloromethane	1	8.49	ND	ug/Kg	U
75-34-3	1,1-Dichloroethane	1	11.0	ND	ug/Kg	U
75-35-4	1,1-Dichloroethene	1	12.9	ND	ug/Kg	U
75-65-0	Tertiary butyl alcohol	1	103	ND	ug/Kg	U
75-69-4	Trichlorofluoromethane	1	13.1	ND	ug/Kg	U
75-71-8	Dichlorodifluoromethane	1	7.12	ND	ug/Kg	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	11.8	ND	ug/Kg	U
78-87-5	1,2-Dichloropropane	1	13.8	ND	ug/Kg	U
78-93-3	2-Butanone	1	24.9	ND	ug/Kg	U
79-00-5	1,1,2-Trichloroethane	1	13.1	ND	ug/Kg	U
79-01-6	Trichloroethene	1	11.9	ND	ug/Kg	U
79-34-5	1,1,2,2-Tetrachloroethane	1	13.6	ND	ug/Kg	U
87-61-6	1,2,3-Trichlorobenzene	1	12.1	ND	ug/Kg	U
87-68-3	Hexachlorobutadiene	1	12.3	ND	ug/Kg	U
91-20-3	Naphthalene	1	9.52	ND	ug/Kg	U
95-47-6	o-xylene	1	15.0	ND	ug/Kg	U
95-49-8	2-Chlorotoluene	1	15.8	ND	ug/Kg	U
95-50-1	1,2-Dichlorobenzene	1	14.2	ND	ug/Kg	U

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10/23/2013

Volatiles - EPA 8260C

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Client Sample ID: BL-1
Matrix: Soil
Remarks: See Case Narrative
Analyzed Date: 10/15/2013
Prepared by Method: 5035A

Type: Composite

Collected: 10/14/2013 11:15
% Solid: 14.6%

Analytical Results

Cas No	Analyte	DF	MDL	Result*	Units	Q
95-63-6	1,2,4-Trimethylbenzene	1	14.9	ND	ug/Kg	U
95-93-2	1,2,4,5-Tetramethylbenzene	1	10.8	ND	ug/Kg	U
96-12-8	1,2-Dibromo-3-chloropropane	1	6.92	ND	ug/Kg	U
96-18-4	1,2,3-Trichloropropane	1	12.3	ND	ug/Kg	U
98-06-6	tert-Butylbenzene	1	14.2	ND	ug/Kg	U
98-82-8	Isopropylbenzene	1	14.5	ND	ug/Kg	U
99-87-6	4-Isopropyltoluene	1	14.7	**126**	ug/Kg	
100-41-4	Ethylbenzene	1	12.1	ND	ug/Kg	U
100-42-5	Styrene	1	12.4	ND	ug/Kg	U
103-65-1	n-Propylbenzene	1	13.4	ND	ug/Kg	U
104-51-8	n-Butylbenzene	1	14.7	ND	ug/Kg	U
105-05-5	p-Diethylbenzene	1	13.6	ND	ug/Kg	U
106-43-4	4-Chlorotoluene	1	14.2	ND	ug/Kg	U
106-46-7	1,4-Dichlorobenzene	1	14.5	**23.3**	ug/Kg	
106-93-4	1,2-Dibromoethane	1	12.8	ND	ug/Kg	U
107-06-2	1,2-Dichloroethane	1	13.8	ND	ug/Kg	U
107-13-1	Acrylonitrile	1	26.6	ND	ug/Kg	U
108-10-1	4-Methyl-2-pentanone	1	33.3	ND	ug/Kg	U
108-38-3	m,p-xylene	1	28.6	ND	ug/Kg	U
108-67-8	1,3,5-Trimethylbenzene	1	14.8	ND	ug/Kg	U
108-86-1	Bromobenzene	1	14.9	ND	ug/Kg	U
108-88-3	Toluene	1	13.0	**170**	ug/Kg	
108-90-7	Chlorobenzene	1	14.7	ND	ug/Kg	U
110-75-8	2-Chloroethylvinylether	1	19.7	ND	ug/Kg	U
120-82-1	1,2,4-Trichlorobenzene	1	12.7	ND	ug/Kg	U
124-48-1	Dibromochloromethane	1	8.15	ND	ug/Kg	U
127-18-4	Tetrachloroethene	1	14.7	ND	ug/Kg	U
135-98-8	sec-Butylbenzene	1	14.9	ND	ug/Kg	U
142-28-9	1,3-Dichloropropane	1	15.0	ND	ug/Kg	U
156-59-2	c-1,2-Dichloroethene	1	12.7	ND	ug/Kg	U
156-60-5	t-1,2-Dichloroethene	1	12.5	ND	ug/Kg	U
541-73-1	1,3-Dichlorobenzene	1	13.9	ND	ug/Kg	U

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Sample: 1310199-1
Client Sample ID: BL-1
Matrix: Soil
Remarks: See Case Narrative
Analyzed Date: 10/15/2013
Prepared by Method: 5035A

Type: Composite

Collected: 10/14/2013 11:15
% Solid: 14.6%

Analytical Results

Cas No	Analyte	DF	MDL	Result*	Units	Q
563-58-6	1,1-Dichloropropene	1	12.0	ND	ug/Kg	U
590-20-7	2,2-Dichloropropane	1	11.9	ND	ug/Kg	U
591-78-6	2-Hexanone	1	22.0	ND	ug/Kg	U
622-96-8	p-Ethyltoluene	1	14.7	ND	ug/Kg	U
630-20-6	1,1,1,2-Tetrachloroethane	1	12.7	ND	ug/Kg	U
994-05-8	TAME	1	12.1	ND	ug/Kg	U
1634-04-4	Methyl t-butyl ether	1	11.8	ND	ug/Kg	U
10061-01-5	c-1,3-Dichloropropene	1	13.3	ND	ug/Kg	U
10061-02-6	t-1,3-Dichloropropene	1	9.93	ND	ug/Kg	U

* Results are reported on a dry weight basis

Surrogate Results

Cas No	Analyte	DF	% Recovery	QC Limits	Q
17060-07-0	1,2-DICHLOROETHANE-D4	1	105.0 %	(79 - 132)	
460-00-4	4-BROMOFLUOROBENZENE	1	92.8 %	(70 - 115)	
4774-33-8	DIBROMOFLUOROMETHANE	1	96.9 %	(77 - 127)	
2037-26-5	TOLUENE-D8	1	94.4 %	(87 - 109)	

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10/23/2013

Semivolatile PAH Compounds - EPA Method 8270/625

Sample: 1310199-1
Client Sample ID: BL-1
Matrix: Soil
Type: Composite
Collected: 10/14/2013 11:15
% Solid: 14.6%
Remarks: See Case Narrative
Analyzed Date: 10/15/2013
Preparation Date(s) : 10/15/2013 by Method: 3550B

Analytical Results

Cas No	Analyte	DF	MDL	Result*	Units	Q
83-32-9	Acenaphthene	1	176	ND	ug/Kg	U
208-96-8	Acenaphthylene	1	200	ND	ug/Kg	U
120-12-7	Anthracene	1	244	ND	ug/Kg	U
56-55-3	Benzo(a)Anthracene	1	325	ND	ug/Kg	U
50-32-8	Benzo(a)Pyrene	1	310	ND	ug/Kg	U
205-99-2	Benzo(b)Fluoranthene	1	299	ND	ug/Kg	U
191-24-2	Benzo(g,h,i)Perylene	1	220	ND	ug/Kg	U
207-08-9	Benzo(k)Fluoranthene	1	462	ND	ug/Kg	U
218-01-9	Chrysene	1	305	ND	ug/Kg	U
53-70-3	Dibenzo(a,h)Anthracene	1	252	ND	ug/Kg	U
206-44-0	Fluoranthene	1	310	ND	ug/Kg	U
86-73-7	Fluorene	1	201	**610**	ug/Kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	1	242	ND	ug/Kg	U
91-20-3	Naphthalene	1	290	ND	ug/Kg	U
85-01-8	Phenanthrene	1	286	**2360**	ug/Kg	J
129-00-0	Pyrene	1	285	ND	ug/Kg	U
91-57-6	2-Methylnaphthalene	1	214	ND	ug/Kg	U

* Results are reported on a dry weight basis

Surrogate Results

Cas No	Analyte	DF	% Recovery	QC Limits	Q
321-60-8	2-FLUOROBIPHENYL	1	93.4 %	(30 - 115)	
4165-60-0	NITROBENZENE-D5	1	86.6 %	(23 - 120)	
1718-51-0	TERPHENYL-D14	1	157.0 %	(18 - 137)	D

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10/23/2013

Mercury by SW846 7470/7471/EPA 245.1

Sample: 1310199-1
Client Sample ID: BL-1
Matrix: Soil
Remarks:
Analyzed Date: 10/18/2013
Preparation Date(s) : 10/18/2013

Type: Composite

Collected: 10/14/2013 11:15
% Solid: 14.6%

Analytical Results

Cas No	Analyte	DF	MDL	Result*	Units	Q
7439-97-6	Mercury	1	0.062	**1.40**	mg/Kg	

* Results are reported on a dry weight basis

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10/23/2013

SCDOH - Metals by Method SW846 6010C

Sample: 1310199-1
Client Sample ID: BL-1
Matrix: Soil
Remarks:
Analyzed Date: 10/17/2013
Preparation Date(s) : 10/18/2013

Type: Composite

Collected: 10/14/2013 11:15
% Solid: 14.6%

Analytical Results

Cas No	Analyte	DF	MDL	Result*	Units	Q
7440-38-2	Arsenic	1	1.27	**5.77**	mg/Kg	
7440-39-3	Barium	1	0.33	**56.5**	mg/Kg	
7440-41-7	Beryllium	1	0.33	**0.87**	mg/Kg	
7440-43-9	Cadmium	1	0.13	**2.87**	mg/Kg	
7440-47-3	Chromium	1	0.40	**44.5**	mg/Kg	
7440-50-8	Copper	1	1.12	**234**	mg/Kg	
7439-92-1	Lead	1	0.77	**138**	mg/Kg	
7440-02-0	Nickel	1	0.47	**10.5**	mg/Kg	
7440-22-4	Silver	1	0.22	**23.3**	mg/Kg	

* Results are reported on a dry weight basis

Environmental Quality Services, Inc.
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10/23/2013

Selenium by Method SW846 6010C

Sample: 1310199-1
Client Sample ID: BL-1
Matrix: Soil
Remarks:
Analyzed Date: 10/17/2013
Preparation Date(s) : 10/17/2013

Type: Composite

Collected: 10/14/2013 11:15
% Solid: 14.6%

Analytical Results

Cas No	Analyte	DF	MDL	Result*	Units	Q
7782-49-2	Selenium	1	2.14	ND	mg/Kg	U

* Results are reported on a dry weight basis

Environmental Quality Services, Inc.
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10/23/2013

Case Narrative

EPA 8260 VOLATILE SOLID ANALYSIS:

The following compounds were calibrated at 10, 40, 100, 200 and 360 ppb levels in the initial calibration curve:
Acetone
2-Butanone
4-Methyl-2-pentanone
2-Hexanone

M&P-Xylenes and 2-Chloroethylvinylether were calibrated at 10, 40, 100, 200 and 360 ppb levels.
Acrolein/Acrylonitrile were calibrated at 20,80,200,400 and 640 ppb levels.
Tert Butyl Alcohol (TBA) and Tert amyl alcohol (TAA) was calibrated at 50,200,500,1000 and 1600 ppb levels.
1,4-Dioxane was calibrated at 100,400, 1000, 2000,and 3200 ppb levels.
All other compounds were calibrated at 2.5, 20, 50, 100 and 160 ppb levels.

The following compounds exhibited a % RSD of >15 % in the initial calibration and continuing calibration with coefficient values <0.99:

Bromomethane (0.98)
Chloroethane (0.97)
Ethanol (0.98)
m&p-xylene (0.98)

Method 8260 low level:

The laboratory is responsible only for the certified testing and is not directly responsible for the integrity of the sample before laboratory receipt.

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10/23/2013

Case Narrative

EPA 8270 Semi-Volatiles

Initial Calibration:
The following compounds exhibited a % RSD of >20 % in the initial calibration and continuing calibration with coefficient values <0.99

2-nitrophenol (0.98)
Benzoic acid (0.82)
4-Chloroaniline (0.98)
2,4-Dinitrotoluene (0.98)
Benzidine (79.6%)

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10/23/2013

ORGANIC METHOD QUALIFIERS

Q - Qualifier - specified entries and their meanings are as follows:

U - The analytical result is not detected above the Method Detection Limit (MDL). All MDL's are lower than the lowest calibration standard concentration.

J - Indicates an estimated value. The concentration reported was between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL).

B - The analyte was found in the associated method blank as well as the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

E - The concentration of the analyte exceeded the calibration range of the instrument.

D - This flag indicates a system monitoring compound diluted out.

INORGANIC METHOD QUALIFIERS

C - (Concentration) qualifiers are as follows:

B - Entered if the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but greater than or equal to the Method Detection Limit (MDL).

U - Entered when the analyte was analyzed for, but not detected above the Method Detection Limit (MDL) which is less than the lowest calibration standard concentration.

Q - Qualifier specific entries and their meanings are as follows:

E - Reported value is estimated because of the presence of interferences.

M - (Method) qualifiers are as follows:

AS - Semi-automated Spectrophotometric
AV - Automated Cold Vapor AA
C - Manual Spectrophotometric
P - ICP
T - Titrimetric

OTHER QUALIFIERS

ND - Not Detected

CHAIN OF CUSTODY

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Innovation Built on Science

208 Route 109, Suite 101 Farmingdale, NY 11735
(T) 631-249-1456 (F) 631-249-8344
www.eqservices.org

13-10199
1310199
Rec'vd Date: 10/14/13 11:44

Client Information

Company Name: CASHIN ASSOCIATES PC
Address: 1200 VETERAN'S MEMORIAL HIGHWAY
City: HAUPPAUGE State: NY Zip: 11788
Project Contact: MARC CALIFANO
Phone #: 631-348-7600 Fax #:
E-mail: MCALIFANO@CA-PC.COM

Project Information

Project Name: Belmont Lake State Park
Street: Belmont Lake State Park
City: Babylon State: NY Zip: 11702
Project #: 12035.014
Sampler's Name: MARC CALIFANO
Sampler's Signature: Marc Califano

Sample Information / Sample Collection / Sample Containers

LAB SAMPLE # (LAB USE ONLY)	Sample ID	Sample Type	Matrix Code	Date	Time	WI/Vol (Air Volume in Liters)	Total # of bottles	Number of Each Preserved Bottle: NONE	HCl	NaOH	HNO3	H2SO4	NaHSO4	MeOH	OTHER	X SCDHS VOC, SVOC, Metals	(LAB USE ONLY)
	BL-1	C	S	10/14/13	1115		2	X								X	

S - Soil
A - Air
OL - Oil
W - Wipe
PC - Paint Chips
SL - Sludge
SD - Solid
DW - Drinking Water
DISS - Dissolved

Sample Type
G=Grab
C=Composite
B=Blank

Turnaround Time (Business Days)

- [X] Standard 7-10 Business Days
- [ ] 5 Day *RUSH*
- [ ] 4 Day *RUSH*
- [ ] 3 Day *RUSH*
- [ ] 2 Day *RUSH*
- [ ] 1 Day *RUSH*

LAB USE ONLY
TAT Approved By / Date:

Data Deliverable Information

- [ ] Results Only (Level-1)
- [ ] Results+ Misc. QC (Lev-2)
- [ ] Results+ALL QC (Lev-3)
- [ ] MA QC Package (LevelMA)
- [ ] NJ QC Package (Level3NJ)
- [ ] CLP Cat A (Level-1)
- [ ] CLP Cat B (Level-4)
- [ ] ASP QC Package (Level-4)
- [ ] Other _____
- [ ] EDD Format _____

(EDD Formats: Excel, pdf, EQUIS, GIS, GISKey)

Comments / Remarks

Type Metals list here: Composite sample of outfall #'S 11, 12, 7

EQS COC Review Check List (LAB USE ONLY)

- [ ] Task Log In and Initial Review Init: _____ Date/Time: _____
- [ ] Final Review and Approval Init: _____ Date/Time: _____
- [ ] Complete and Invoiced Init: _____ Date/Time: _____

Sample custody must be documented below, each time samples change possession, with a signature, date, and time.

	Relinquished by Sampler:	Date / Time:	Received By:	Relinquished By:	Date / Time:	Received By:
1	Marc Califano	10/14/13 1140	1	2	2	2
3	Relinquished by:	Date / Time:	Received By:	Relinquished By:	Date / Time:	Received By:
		3	3	4	4	4
5	Relinquished by:	Date / Time: 10/14/13	Received By: K. Allen			

COOLER INFORMATION

Cooler Temp: 5 [X] On Ice [ ] Sample Receipt Discrepancy(attach information) [ ] Preserved where applicable

Environmental Quality Services, Inc.
208 Route 109 Suite 101, Farmingdale NY 11735
Phone - 631-249-1456 Fax - 631-249-8344

10/23/2013

ANALYTICAL REPORT

Laboratory Identifier: 1310270
Received: 10/18/2013 15:47
Sampled by: Marc Califano

Client: Cashin Associates, PC
1200 Veterans Memorial Hwy
Hauppauge,
NY 11788

Project: BELMONT LAKE STATE PARK
BELMONT LAKE STATE PARK
BABYLON,
NY 11702

Manager: Marc Califano

Respectfully submitted,

Juan R.Cuba - Technical Director

NYS Lab ID # 10969
NJ Lab ID # PH0645
CT Lab ID # PH0645

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10/23/2013

TCLP Lead by Method SW846 1311/6010C

Sample: 1310270-1
Client Sample ID: BL-1
Matrix: Soil
Remarks:
Analyzed Date: 10/21/2013
Preparation Date(s) : 10/21/2013

Collected: 10/14/2013 11:15
Type: Composite

Analytical Results

Cas No	Analyte	DF	MDL	Result	Units	Q
7439-92-1	Lead	1	0.023	**0.30**	mg/L	

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10/23/2013

ORGANIC METHOD QUALIFIERS

Q - Qualifier - specified entries and their meanings are as follows:

U - The analytical result is not detected above the Method Detection Limit (MDL). All MDL's are lower than the lowest calibration standard concentration.

J - Indicates an estimated value. The concentration reported was between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL).

B - The analyte was found in the associated method blank as well as the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

E - The concentration of the analyte exceeded the calibration range of the instrument.

D - This flag indicates a system monitoring compound diluted out.

INORGANIC METHOD QUALIFIERS

C - (Concentration) qualifiers are as follows:

B - Entered if the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but greater than or equal to the Method Detection Limit (MDL).

U - Entered when the analyte was analyzed for, but not detected above the Method Detection Limit (MDL) which is less than the lowest calibration standard concentration.

Q - Qualifier specific entries and their meanings are as follows:

E - Reported value is estimated because of the presence of interferences.

M - (Method) qualifiers are as follows:

AS - Semi-automated Spectrophotometric
AV - Automated Cold Vapor AA
C - Manual Spectrophotometric
P - ICP
T - Titrimetric

OTHER QUALIFIERS

ND - Not Detected

CHAIN OF CUSTODY

ENVIRONMENTAL QUALITY SERVICES
Innovation Built on Science
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www.eqservices.org

Q2 | 13-10270 | 1310270 | Rec'vd Date: 10/18/13 15:47

Client Information

Company Name: Cashin
Address:
City: State: Zip:
Project Contact: Marc Califano
Phone #: Fax #:
E-mail:

Project Information

Project Name: Belmont State Park
Street:
City: Babylon State: NY Zip:
Project #:
Sampler's Name: Marc Califano
Sampler's Signature:

TCLP Lead

LAB SAMPLE # (LAB USE ONLY)	Sample Information: Sample ID	Sample Type	Matrix Code	Sample Collection: Date	Time	WI/Vol (Air Volume in Liters)	Sample Containers: Total # of bottles	NONE	HCl	NaOH	H2SO4	HNO3	NaHSO4	MeOH	OTHER	
	BL-1	C	S	10/4			1	X								X

Sample Containers: Number of Each Preserved Bottle

Sample Type: G=Grab, C=Composite, B=Blank

Matrix Codes: A - Air, OL - Oil, W - Wipe, PC - Paint Chips, SL - Sludge, SD - Solid, DW - Drinking Wa, DISS - Dissolved

(LAB USE C

Turnaround Time (Business Days)

- [Q2] Standard 7-10 Business Days
- [ ] 5 Day *RUSH*
- [ ] 4 Day *RUSH*
- [ ] 3 Day *RUSH*
- [ ] 2 Day *RUSH*
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(EDD Formats: Excel, pdf, EQUIS, GIS, GISKey)

Comments / Remarks

Type Metals list here: 1310199

EQS COC Review Check List (LAB USE ONLY)

- [ ] Task Log In and Initial Review — Init: ____ Date/Time: ____
- [ ] Final Review and Approval — Init: ____ Date/Time: ____
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1	Client Submit	10/18/13	1	2	10/18/13	2
2	Relinquished by:	Date / Time:	Received By:	Relinquished By:	Date / Time:	Received By:
	3	3	3	4	4	4
3	Relinquished by:	Date / Time:	Received By:			
	5	5	5			

COOLER INFORMATION

Cooler Temp: ____ [ ] On Ice [ ] Sample Receipt Discrepancy(attach information) [ ] Preserved where applic

Attachment 3

UNDERGROUND INJECTION CONTROL

STRUCTURE CLOSURE SPECIFICATIONS

SECTION 021500
UNDERGROUND INJECTION CONTROL STRUCTURE CLOSURE

PART 1 - GENERAL

1.1 DESCRIPTION

A. Scope of Work:

1. The Contractor shall furnish all labor, materials, supplies, equipment, power, facilities and incidentals necessary to properly close existing underground injection control (UIC) structures located throughout the site, as shown on the Drawings. Work includes, but is not limited to, removal and disposal of standing liquids within the structures, removal of sludge and soil from the bottom of the structures, and backfilling and sealing the structures.

2. Closure of the Underground Injection Control (UIC) structures must be conducted in accordance with all applicable federal, state and local regulations. Specifically, closure must be conducted in accordance with the Suffolk County Department of Health's (SCDHS's) "Standard Operating Procedure for the Administration of Article 12 of the Suffolk County Sanitary Code", and the approved UIC Closure Plan, as provided by the Owner.

3. The work shall include removal of all materials regardless of type, character, composition, weight, size or condition.

4. All waste generated during completion of the Work shall be managed in accordance with Section 021300, Waste Transportation and Disposal, and all applicable federal, state and local regulations.

5. The Work shall include all temporary means to manage and control storm water discharge, and prevent siltation and sedimentation of existing storm water management systems during the performance of the Work.

6. The Contractor shall examine the areas and conditions under which Work shall be performed. The Contractor shall correct all conditions detrimental to proper and timely completion of the Work and shall not proceed until unsatisfactory conditions have been corrected. The Contractor shall immediately notify the Owner of any perceived differences in existing conditions which may impact the Work.

7. At all times during closure activities, the Contractor shall provide equipment and facilities to remove all generated wash water. The Contractor shall be responsible for excavating and backfilling, in accordance with these Specifications, any soil contaminated due to improper containment of wash water at no additional expense to the Owner.

PART 2 - PRODUCTS - (NOT USED)

PART 3 - EXECUTION

A. The Contractor shall notify the Engineer, NYSDEC, and the USEPA at least 5 days prior to any field work related to UIC structure closure.

B. The Contractor shall give special attention to the buildings and structures that are in close proximity of the Work and shall implement all necessary measures to prevent damage to property. Damage to buildings or structures, not scheduled for demolition shall be repaired at the Contractor's expense.

C. The Contractor shall completely secure any open UIC structures and excavation at the conclusion of the Work or at the end of the day, whichever is sooner. The cover shall be weather-tight and prevent infiltration of storm water and drainage water, and prevent the release of vapors and odors. The cover shall be positioned to shed precipitation, storm water runoff and drainage water. Open UIC structures and excavations shall be barricaded with safety fencing, signs and other means as required by federal, state and local laws and regulations.

D. The Contractor shall prevent the release of vapors, odor and dust originating during excavation of the UIC structures, removal of liquid, sediment and soil from the UIC structures, loading materials and any other operations required by this Contract.

3.1 CESSPOOL CLOSURE

A. The Contractor shall remove the cover, frame, stack, dome, debris, and soil in the vicinity of the cesspool to completely expose the top of the cesspool.

B. The Contractor shall remove the dome, top slab and/or "stack" of the cesspool, including the manhole rims and covers, if present, to provide an open excavation which extends from ground surface to the bottom of the cesspool.

C. All liquids and sludge shall be removed from the cesspool to the existing sediment surface and placed immediately into approved liquid waste hauling vehicles for off-site disposal.

D. Where directed by the Engineer, the interior walls of the cesspool shall be power washed by the Contractor. The Contractor shall collect, characterize, remove and dispose of all soil, sludge, sediment, debris, wastewater, wash water and residuals from the cesspool. In power washing the cesspool, the Contractor shall minimize the generation of wastewater and maximize the capture of the wash water.

E. Where directed by the Engineer, excavation of the soil beneath the cesspool shall be accomplished as specified by Section 310000, Earthwork, to the horizontal extent of the inside of the rings of the cesspool and as approved by the Engineer.

F. Excavation of any visually stained soil or soil exhibiting elevated PID readings shall be accomplished as specified in Section 310000, Earthwork, as directed by the

3.3 SEPTIC SYSTEM CLOSURE

A. The Contractor shall remove the debris, and soil in the vicinity of the septic system to completely expose the septic tank and associated discharge piping.

B. The Contractor shall remove the dome, top slab and/or "stack" of the septic tank, including the manhole rims and covers, if present, to provide an open excavation which extends from ground surface to the bottom of the septic tank.

C. All liquids and sludge shall be removed from the septic tank and placed immediately into approved liquid waste hauling vehicles for off-site disposal.

D. Where removal is indicated on the drawings or as directed by the Engineer, the Contractor shall excavate and completely remove the septic tank and associated drainage piping. Excavation of any visually stained soil or soil exhibiting elevated PID readings shall be accomplished as specified in Section 310000, Earthwork, as directed by the Engineer. All contaminated soil excavated shall be disposed off-site in accordance with Section 021300, Waste Transportation and Disposal.

E. The Contractor shall be responsible for all structural support, bracing, shoring, backfilling etc., necessary to prevent damage, to nearby structures scheduled to remain.

F. The septic tank(s) shall be removed and/or abandoned in place as indicated on the drawings. Where the drawings indicate the tank is to be abandoned in place, the bottom slab of the septic tank(s) shall be completely broken-up to allow proper drainage. The septic tank(s) shall be backfilled and compacted in accordance with the requirements specified in Section 310000, Earthwork.

G. Once the Contractor has obtained approval by the Engineer, the excavation shall be backfilled unless the structure is to be replaced at the same location. Backfill and compaction shall be completed in accordance with the requirements specified in Section 310000, Earthwork.

PART 4 – MEASUMENT AND PAYMENT

Compensation and full payment for the closure and approved abandonment of the existing septic systems, shown on the plans and including septic tanks, cesspools, manholes and all related appurtenances shall be at the sump sum price bid for each system.

END OF SECTION